

109TH CONGRESS
1ST SESSION

H. R. 1291

To require the Secretaries of Health and Human Services, Defense, and Homeland Security to carry out activities toward bringing to market effective medical countermeasures to radiation from a nuclear or radiological attack.

IN THE HOUSE OF REPRESENTATIVES

MARCH 15, 2005

Mr. ISSA (for himself, Mrs. DAVIS of California, and Mr. SESSIONS) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Armed Services and Homeland Security, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To require the Secretaries of Health and Human Services, Defense, and Homeland Security to carry out activities toward bringing to market effective medical countermeasures to radiation from a nuclear or radiological attack.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Radioprotectant Pro-
5 curement Act of 2005”.

1 **SEC. 2. FINDINGS.**

2 Congress finds as follows:

3 (1) The threat of a radiological or nuclear at-
4 tack on the American people is one of the greatest
5 potential threats now faced by the United States,
6 considering the potential number of deaths, injuries,
7 illnesses and economic devastation such an attack on
8 American civilians or military personnel could have.

9 (2) There are at least 30,000 known nuclear
10 weapons deployed around the world today and the
11 proliferation of nuclear weapons technology con-
12 tinues to pose an enormous threat to the United
13 States, its people, and its interests and allies around
14 the world.

15 (3) Even a crude radiological weapon, using
16 conventional explosives combined with widely avail-
17 able radiological materials, could cause death, radi-
18 ation sickness, and widespread panic and economic
19 hardship if detonated in an urban center of the
20 United States, and such an attack would dramati-
21 cally strain our public health resources.

22 (4) Numerous government and private studies,
23 including the findings of several leading medical
24 journals, have concluded that a nuclear weapon deto-
25 nated in a large urban center would cause wide-
26 spread death, sickness, and physical and economic

1 damage. For example, in February 2002, the British
2 Medical Journal estimated that a 12.5 kiloton nu-
3 clear bomb (approximately the size of the bomb used
4 at Hiroshima), if detonated in New York City, would
5 cause 50,000 immediate deaths, 200,000 short-term
6 deaths from high-exposure radiation injury, and
7 700,000 cases of radiation sickness.

8 (5) There are 103 nuclear power plants in the
9 United States, each with the potential to expose area
10 residents to high levels of radiation in the event of
11 a successful attack.

12 (6) For potentially stockpiled radioprotectants
13 to be most effective, they must be administered soon
14 after exposure to radiation, so the procurement of a
15 radioprotectant must be large enough and located in
16 enough regions of the country to facilitate the rapid
17 treatment of the hundreds of thousands and poten-
18 tially millions of Americans who would be exposed to
19 radiation, as well as the many “worried well” who
20 will flood emergency rooms should a nuclear or radi-
21 ological attack or large accident occur.

22 (7) Considering the need to rapidly administer
23 a radioprotectant, Federal procurement of an effec-
24 tive radioprotectant should be comparable to stock-

1 piles of other drugs designed to counter the effects
2 of chemical or biological agents.

3 (8) Current treatment options for acute radi-
4 ation exposure are wholly inadequate, with potas-
5 sium iodide being the only widely stockpiled counter-
6 measure currently available. This treatment protects
7 against the long-term risk of thyroid cancer, and
8 does nothing to counteract short-term radiation sick-
9 ness and possible death within the first 30 days of
10 exposure.

11 (9) Effective medical countermeasures to both
12 acute and long-term exposure of radiation are pres-
13 ently in development at the Armed Forces
14 Radiobiology Research Institute (“AFRRI”) and
15 among pharmaceutical companies, including at least
16 one compound that has demonstrated efficacy in
17 preventing radiation sickness and death caused by
18 the destruction of bone marrow from acute radiation
19 exposure.

20 (10) While the Departments of Health and
21 Human Services, Homeland Security, and Defense
22 are appropriately dedicating substantial resources to
23 the development and procurement of counter-
24 measures to biological threats, including smallpox
25 and anthrax vaccines, few resources to date have

1 been dedicated to bring to market and procure one
2 or more effective, whole-body radioprotectants.

3 (11) In enacting the Homeland Security Act of
4 2002, it was and is the intent of Congress that the
5 development and procurement of radiological and
6 nuclear countermeasures be given full and appro-
7 priate consideration and dedication of resources.

8 (12) The Department of Health and Human
9 Services has issued a request for information about
10 radioprotectants to treat acute radiation sickness
11 (“ARS”). The Department should move forward
12 with all due haste to procure countermeasures
13 against ARS and other major health consequences of
14 acute radiation exposure.

15 **SEC. 3. AMENDMENT TO THE HOMELAND SECURITY ACT OF**
16 **2002.**

17 Section 304 of the Homeland Security Act of 2002
18 (6 U.S.C. 184; Public Law 107–296) is amended by add-
19 ing at the end the following subsection:

20 “(d) DEVELOPMENT AND PROCUREMENT OF RADI-
21 ATION MEDICAL COUNTERMEASURES.—For the purpose
22 of rapidly developing, bringing to market, and procuring
23 whole-body radioprotectants, the Secretaries of Health
24 and Human Services, Homeland Security, and Defense
25 shall utilize and expend such funds as may be necessary,

1 including funds appropriated by Congress, and not other-
 2 wise prohibited from being used for such purpose, under
 3 the appropriations headings ‘Public Health Programs’,
 4 ‘Strategic National Stockpile’, ‘Nuclear and Radiological
 5 Countermeasures’, ‘Biodefense Countermeasures’, ‘Re-
 6 search, Development, Acquisition and Operations’, ‘Bio-
 7 logical Countermeasures’, and ‘Chem-Bio Defense Initia-
 8 tive’, as well as relevant departmental and subagency oper-
 9 ations budgets, subject to the appropriations Act in-
 10 volved.”.

11 **SEC. 4. REPORT REGARDING EFFECTIVE**
 12 **RADIOPROTECTANTS; DEVELOPMENT AND**
 13 **PROCUREMENT.**

14 (a) REPORT.—Not later than 30 days after the date
 15 of the enactment of this Act, the Secretary of Homeland
 16 Security (referred to in this section as the “Secretary”)
 17 shall, in consultation with the Secretary of Health and
 18 Human Services and the Secretary of Defense, submit to
 19 the Congress a report providing a determination by the
 20 Secretary of—

21 (1) the scope and nature of the threat of a nu-
 22 clear or radiological attack against the United
 23 States; and

1 (2) the current and potential future availability
2 of effective radioprotectant medical countermeasures
3 against—

4 (A) acute radiation sickness;

5 (B) DNA mutagenesis; and

6 (C) other major health consequences of
7 acute radiation exposure.

8 (b) DEVELOPMENT AND PROCUREMENT.—

9 (1) IN GENERAL.—If in carrying out subsection
10 (a) the Secretary determines that one or more effec-
11 tive radioprotectants are currently available, or may
12 become available within a reasonable amount of
13 time, then not later than 60 days after the submis-
14 sion of the report under such subsection, the Sec-
15 retary shall enter into one or more agreements with
16 one or more private companies for the development
17 and procurement of one or more effective, safe, sta-
18 ble, and low-cost radioprotectants, subject to the
19 availability of funds under an appropriations Act.

20 (2) ADEQUATE PROTECTION.—An agreement
21 under paragraph (1) shall provide for the procure-
22 ment and stockpiling of enough dose regimens of the
23 radioprotectants involved to provide for adequate
24 protection of the people of the United States, includ-
25 ing adequate response to a multi-location attack sce-

nario, if in carrying out subsection (a) the Secretary determines that such a scenario is plausible.

(3) CERTAIN AUTHORITIES.—

(A) DEVELOPMENT.—With respect to an agreement under paragraph (1) that provides funds for the development of a radioprotectant, the Secretary may use the same authorities as are described in subsections (b) through (e) of section 319F–1 of the Public Health Service Act.

(B) PROCUREMENT.—With respect to an agreement under paragraph (1) that provides funds for the procurement of a radioprotectant, the Secretary may use the same authorities as are described in section 319F–2(c)(7) of the Public Health Service Act.

(C) CONDITIONS.—An agreement under paragraph (1) may contain such reasonable conditions in addition to the conditions required in paragraph (2) as the Secretary determines to be appropriate, including—

(i) the condition that some or all procurement payments be contingent upon approval of the radioprotectants by the Food and Drug Administration; and

1 (ii) the condition that the company or
2 companies that produce such
3 radioprotectants may be required to as-
4 sume the development costs of improve-
5 ments to the radioprotectants, but such
6 costs may be considered in determining the
7 payment for such improvements.

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